Form 1449 (Modified)

Supplemental Information Statement By Applicant

DEC 0 5 2007

Atty Docket No. UCALP031

Application No.:

10/540,658

re Applicant:

Richard A. Mathies, et al.

Group 1637

(Use Several Sheets if Necessary)

Filing Date June 23, 2005

U.S. Patent Documents

Examiner						Sub-	Filing
Initial	No.	Patent No.	Date	Patentee	Class	class	Date
	Al	5,587,128	12/1996	Wilding et al.		8	
	A2	5,856,174	01/1999	Lipshutz et al.	8	<u> </u>	
	A3	6,073,482	06/2000	Moles, Donald R.	80		
	A4	6,521,188	02/18/03	Webster	900		
	A5	6,786,708	09/07/04	Brown et al.	2000		
	A6	2001/0014091	01/2004	Duck et al.		<u> </u>	
	A7	2002/0098097	07/25/02	Singh	8		

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication	Country or		Sub-	Trans	slation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
	B1	WO 00/40712	07/2000	PCT	000000000000000000000000000000000000000	***************************************		
	B2							

Other Documents

	Other Documents		
No.	Author, Title, Date, Place (e.g. Journal) of Publication		
C1	Grover et al., Practical Valves and Pumps for Large-Scale Integration into		
	Microfludic Analysis Devices. Micro Total Analysis Systems (Nov. 2002), 2 pages		
C2	Soper, S.A., D.C. Williams, Y. Xu, S.J. Lassiter, Y. Zhang, S.M. Ford, and R.C.		
	Bruch, Sanger DNA sequencing reactions performed in a solid-phase nanoreactor		
	directly coupled to capillary gel electrophoresis. Anal. Chem., 1998. 70: p. 4036-		
	4043.		
C3	Hultman, T., S. Bergh, T. Moks, and M. Uhlén, Bidirectional solid-phase sequencial		
	of in vitro-amplified plasmid DNA. BioTechniques, 1991. 10: p. 84-93.		
C4	Nakano, H., K. Kobayashi, S. Ohuchi, S. Sekiguchi, and T. Yamane, Single-step		
1	single-molecule PCR of DNA with a homo-priming sequence using a single primer		
	and hot-startable DNA polymerase. Journal of Bioscience and Bioengineering, 2000		
	90(4): p. 456-458.		
C5			
	Church, Digital genotyping and haplotyping with polymerase colonies. Proceedings of the National Academy of Sciences of the United States of America, 2003. 100(10):		
]			
	p. 5926-5931.		
/Y	oung J. Kim/ Date Considered 02/06/2008		
	C1 C2 C3 C4		

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Pg. 1 of 4

Form 1449 (Modified)	Atty Docket No.	Application No.:
	UCALP031	10/540,658
Supplemental Information Disclosure	Applicant:	
Statement By Applicant	Richard A. Mathies, et al.	
	Filing Date	Group
(Use Several Sheets if Necessary)	June 23, 2005	1637

Other Documents

		Y
Examiner	1	
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	C6	Dressman, D., H. Yan, G. Traverso, K.W. Kinzler, and B. Vogelstein, <i>Transforming single DNA molecules into fluorescent magnetic particles for detection and enumeration of genetic variations.</i> Proceedings of the National Academy of Sciences of the United States of America, 2003. 100(15): p. 8817-8822.
	C7	Brenner, S., et al., Gene expression analysis by massively parallel signature sequencing (MPSS) on microbead arrays. Nature Biotechnology, 2000. 18(6): p. 630-634.
	C8	Liu, S., Y. Shi, W.W. Ja, and R.A. Mathies, Optimization of high-speed DNA sequencing on microfabricated capillary electrophoresis channels. Anal. Chem., 1999. 71: p. 566-573.
	С9	Leamon, J.H., W.L. Lee, K.R. Tartaro, J.R. Lanza, G.J. Sarkis, A.D. deWinder, J. Berka, and K.L. Lohman, <i>A massively parallel Pico Titer Plate (TM) based platform for discrete picoliter-scale polymerase chain reactions</i> . Electrophoresis, 2003. 24: p. 3769-3777.
	C10	Ghadessy, F.J., J.L. Ong, and P. Holliger, <i>Directed evolution of polymerase function by compartmentalized self-replication</i> . PNAS, 2001. 98: p. 4552-4557.
	C11	Rye, H.S., M.A. Quesada, K. Peck, R.A. Mathies, and A.N. Glazer, High-sensitivity two-color detection of double-stranded DNA with a confocal fluorescence gel scanner using ethidium homodimer and thiazole orange. Nucleic Acids Res., 1991. 19: p. 327-333.
	C12	Fleming, N., J. Maynard, L. Tzitzis, J.R. Sampson, and J.P. Cheadle, LD-PCR coupled to long-read direct sequencing: an approach for mutation detection in genes with compact genomic structures. Journal of Biochemical and Biophysical Methods, 2001. 47(1-2): p. 131-136.
	C13	Blazej, R.G., B.M. Paegel, and R.A. Mathies, <i>Polymorphism ratio sequencing: A new approach for single nucleotide polymorphism discovery and genotyping.</i> Genome Research, 2003. 13: p. 287-293.
	C14	
Examiner		/Young J. Kim/ Date Considered 02/06/2008

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified)	Atty Docket No.	Application No.:
	UCALP031	10/540,658
Supplemental Information Disclosure	Applicant:	
Statement By Applicant	Richard A. Mathies, et al.	
	Filing Date	Group
(Use Several Sheets if Necessary)	June 23, 2005	1637

Other Documents

	_			
Examiner				
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication	
	C15	Simpson, P.C., A.T. Woolley,	and R.A. Mathies, Microfabrication technology for ray electrophoresis chips. Biomedical Microdevices,	
	C16	throughput DNA sequencing	J.J. Wedemayer, J.R. Scherer, and R.A. Mathies, <i>Highwith a 96-Lane capillary array electrophoresis</i> the National Academy of Science, U.S.A., 2002. 99: p.	
	C17	Poly-N-hydroxyethylacrylami	chholz, P.J. Huiberts, T.M. Stein, and A.E. Barron, de (polyDuramide): A novel hydrophilic self-coating encing by capillary electrophroesis. Electrophoresis,	
	C18	<u> </u>	nd A.E. Barron, A novel thermogelling matrix for ig based on poly-N-alkoxyalkylacrylamide copolymers. p. 4161-4169.	
	C19	 C19 Doherty, E.A.S., C.W. Kan, and A.E. Barron, Sparsely cross-linked "nanogels" for microchannel DNA sequencing. Electrophoresis, 2003. 24(24): p. 4170-4180. C20 Giddings, M.C., J. Severin, M. Westphall, J. Wu, and L.M. Smith, A software syst for data analysis in automated DNA sequencing. Genome Research, 1998. 8: p. 665. C21 Ewing, B., L. Hillier, M.C. Wendl, and P. Green, Base-calling of automated sequencer traces using Phred. Genome Research, 1998. 8: p. 175-185. C22 Ewing, B. and P. Green, Base-calling of automated sequencer traces using phred. II. Error probabilities. Genome Research, 1998. 8: p. 186-194. C23 Buchholz, B.A. and A.E. Barron, The use of light scattering for precise characterization of polymers for DNA sequencing by capillary electrophoresis. Electrophoresis, 2001. 22: p. 4118-4128. 		
	C20			
	C21			
	C22			
	C23			
Examiner	/\	Young J. Kim/	Date Considered 02/06/2008	

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified)	Atty Docket No.	Application No.:
	UCALP031	10/540,658
Supplemental Information Disclosure	Applicant:	
Statement By Applicant	Richard A. Mathies, et al.	
1	Filing Date	Group
(Use Several Sheets if Necessary)	June 23, 2005	1637

Other Documents

Examiner	<u>"</u>	<u> </u>			
	NT.	Author, Title, Date, Place (e.g. Journal) of Publication			
Initial	No.				
	C24	1 • 1	retic injection within microdevices. Analytical		
		Chemistry 74, 1952-1961 (20			
	C25		ilov, R. F. A microfluidic system for controlling		
		1	gewandte Chemie-International Edition 42, 768-772		
		(2003).			
	C26		R., Howe, R. T. & Maboudian, R. Alkyltrichlorosilane-		
		based self-assembled monolay	yer films for stiction reduction in silicon		
		micromachines. Journal of M	Sicroelectromechanical Systems 7, 252-260 (1998).		
	C27		. D. & Ismagilov, R. F. Formation of droplets and		
		mixing in multiphase microflu	uidics at low values of the Reynolds and the capillary		
		numbers. Langmuir 19, 9127-	numbers. Langmuir 19, 9127-9133 (2003).		
	C28	Peter C. Simpson, et al., High	-throughput genetic analysis using microfabricated 96-		
		sample capillary array electro	sample capillary array electrophoresis microplates, <i>Proc. Natl. Acad. Sci. USA</i> , Vol.		
		95, pp. 2256-2261, March 1998 Biophysics.			
	C29	Pierre J. Obeid, et al., Microfabricated Device for DNA and RNA Amplification by			
		Continuous-Flow Polymerase	Chain Reaction and Reverse Transcription-		
		Continuous-Flow Polymerase Chain Reaction, <i>Anal. Chem.</i> , Vol. 75, No. 21, November 1, 2003, pp. 6029-6033.			
	C30				
	C31				
		January 1, 2003, pp. 1-7.			
	C32		2007 in U.S. Appln. No. 10/750,533, filed December		
		29, 2003.			
	C33				
Examiner	/Y	oung J. Kim/	Date Considered 02/06/2008		
	, ,	or constant	02/00/2006		

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.